DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

FACT SHEET

GENERAL PERMIT NCG140000
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE STORMWATER AND WASTEWATER

Permit No. NCG**14**0000 Date: April 19, 2017
(Revised May 16, 2017)
(Corrected May 30, 2017)

1. TYPES OF DISCHARGES COVERED

a. Industrial Activities Covered by this General Permit

NCG140000 General Permit Coverage is applicable to owners or operators of industrial stormwater discharges and on-site vehicle maintenance area stormwater discharges associated with ready-mixed concrete manufacturing activities [standard industrial classification (SIC) **3273**], and authorized process wastewater discharges. Coverage is also applicable to stormwater point source discharges **from like industrial activities** deemed by the Division of Energy, Mineral, and Land Resources (DEMLR) to be similar to these operations in the process, or the discharges, or the exposure of raw materials, intermediate products, by-products, products, or waste products.

b. Types of Operations Covered

Ready-mixed concrete is a covered activity as per 40 CFR 122.26(b)(14). This General Permit covers all on-site activities and features associated with the ready-mixed concrete manufacturing activity. Covered industrial activities and site features may include, but are not limited to: all industrial areas where stormwater contacts scales, receiving, staging, crushing, mixing, screening, rejects piles, loading, and stockpiles of raw, intermediate, or finished product, by-products and waste products. Also permitted are stormwater flows from on-site vehicle and equipment maintenance areas. Additionally, the construction and operation of process wastewater treatment facilities, and authorized process wastewater discharges (those associated with vehicle and equipment cleaning, raw material stockpiles, and mixing drum cleanout) are also permitted under this permit.

The following activities are specifically excluded from coverage under this General Permit: Disposal of process wastewater not specifically designated in this permit, and disposal of any concrete directly into stormwater conveyances, storm sewer outfalls, or into waters of the state.

c. Characteristics of Discharged Stormwater and Wastewater

The ready-mixed concrete industrial process includes the delivery and storage of raw materials (aggregates including sand, gravel and/or crushed stone, Portland cement, ash, and water) mixed at a centralized batch plant. Flows resulting from onsite activities include stormwater that has contacted recycled crushed concrete, vehicle maintenance areas (VMA), and raw and waste materials. Additionally ready-mixed concrete sites discharge process wastewater flows associated with vehicle and equipment cleaning, raw material stockpile irrigation, and mixing drum cleanout. Flows resulting from the manufacturing process activities and from contact with on-site materials can be highly variable in pollutant strength.

Total suspended solids (TSS) and pH continue to be the primary pollutants of concern in stormwater discharges associated with mining activities and related land disturbances at these sites. Process wastewater discharges from these operations have similar pollutant characteristics, and introduce a possibility for settleable solids (SS) impacts. TSS levels are of special concern in HQW, ORW, Trout, and PNA-classified waters, and 15A NCAC 02B .0224 sets special limits for wastewater discharges to these waters. Because of these two factors, stormwater benchmarks and wastewater limits have been set at lower levels for discharges to those receiving water classifications.

Stormwater – Ready-Mix Concrete Activities: TSS and pH remain primary indicators for stormwater pollution introduced by ready-mix concrete activities. Both parameters assist in establishing when elevated TSS and/or pH levels in-stream are the result of the facility's discharges.

Stormwater – Vehicle Maintenance Activities (VMAs): Although the analysis is the same, the parameter name "Total Petroleum Hydrocarbons (TPH)" for stormwater discharges associated with vehicle maintenance has been replaced by "Non-polar Oil & Grease by EPA Method 1664 (SGT-HEM)." This description causes less confusion for permittees and their laboratories because the request for "TPH" can be confused with more expensive gas chromatography tests for this group of compounds. Non-polar O&G continues to be a useful indicator for targeting petroleum-based oils and greases. DEMLR has retained the benchmark from the previous permit. We would only expect levels to exceed that 15 mg/l in discharges with significant oil contamination. Based on the relatively small number of mines that trigger the need to monitor discharges from VMAs, and the few hits outside of the pH range of 6-9, the proposed monitoring suite removes the requirement to monitor pH.

Wastewater –Process Wastewater:

Wastewater discharge parameters are the same as in the previous permit cycle. Federal effluent guidelines, 40 CFR 411 establish total suspended solids (TSS) and pH effluent limits for this industry. The federal limits for TSS and pH are 50 mg/l and 6.0-9.0, respectively. However, as in the previous permit terms, this general permit sets the limit for TSS at 30 mg/l. Contributions of settleable solids from wastewater discharges to sensitive waters remain a concern in North Carolina, and therefore its wastewater limit remains in this permit. 15A NCAC 02B .0224 sets limits for the total volume of wastewater in HWQ-classified water bodies. As

before, wastewater discharging to HWQ waters has been set at 50% of the summer 7Q10 flow. This renewal changes the monitoring parameter from volume to a flow rate.

d. Geographic Area Covered by this General Permit

Discharges covered by this General Permit are located at any place within the political boundary of the State of North Carolina. However, discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the U.S. Environmental Protection Agency, rather than DWQ, and are not eligible for coverage under this General Permit.

e. Receiving Waters

Receiving waters include all surface waters of North Carolina or municipal separate storm sewer systems conveying stormwater to surface waters, with some notable exceptions. New or expanding wastewater discharges to freshwater ORW-classified water bodies are prohibited in North Carolina by 15A NCAC 2B .0225. Special limits may apply in areas draining to ORWs. Other areas with water quality management plans may limit or prohibit new or expanding wastewater discharges. NCG140000 will not cover wastewater discharges to these above-mentioned water bodies. Some permittees may be able to receive individual permits for wastewater discharges in areas *draining* to ORWs. Stormwater-only discharges to ORW-classified waters may be allowed under NCG140000 with some provisions for new stormwater discharges.

2. CONSTRUCTING AND OPERATION OF A TREATMENT FACILITY

An "Authorization to Construct" (ATC) permit for new or expanding wastewater treatment facilities was once required by 15A NCAC 02H .0100 for the construction and operation of water pollution control facilities necessary to comply with NPDES permit conditions. That authorization had been incorporated into the NCG140000 General Permit to streamline the permitting process. In 2011, Section 9 of **Session Law 2011-394** eliminated the ATC requirement for industrial wastewater treatment facilities (See **Appendix A**). The revised permit contains significant revisions in Part II, Sections A and B that reflect the change.

Also now absent from the revised General Permit is the authorization to construct and operate a Closed-Loop Recycle System (CLRS) that meets the requirements of the 15A NCAC 02T .1000 Rules. (*Requirements for these recycle systems are driven by a State program and were not impacted by SL 2011-394's changes to the State Statute.*) **Facilities that construct and operate CLRS facilities must apply and obtain the necessary permits or approvals through the Non-Discharge Permitting Program in the Division of Water Resources (DWR).** This change was prompted by the Stormwater Permitting Program's move out of DWR into DEMLR and helps ensure appropriate Division oversight of these systems. Systems that are **not designed as closed-loop and have the potential to discharge** to surface waters are still covered by NCG140000.

The Session Law did not remove authority for the Division to require that permittees notify the DEMLR Regional Office in advance of operation of newly installed or expanded wastewater treatment facilities. This directive remains a condition of this proposed permit (Part II, Section A). *The rationale is that this notification alerts NC DENR of potentially significant changes to wastewater discharges and allows the opportunity for an inspection to verify compliance with the NPDES permit.*

3. PROPOSED DISCHARGE CONTROLS AND LIMITATIONS

a. Stormwater Pollution Prevention Plan

As in the previous version of this General Permit, stormwater pollution must be controlled by the development and implementation of a Stormwater Pollution Prevention Plan (SPPP). DEMLR continues to believe that effective control of the pollutant content in industrial stormwater discharges can only be achieved when site management implements a written, site-specific management plan serving that objective. The revised draft permit contains several minor improvements in the SPPP largely related to improved clarity of language in the permit text. See the draft permit for the proposed new version of the SPPP requirements. All facilities covered under this General Permit must develop and implement an SPPP.

b. Stormwater discharge analytical monitoring

As in the previous version of this General Permit, all permittees must perform twice-per-year analytical monitoring of the stormwater discharges, must respond to any exceedances of the numerical benchmark values for the monitored parameters, must keep records of the monitoring results and the permittee's response actions, and must report the monitoring results to DEMLR. As before, the permittee has the option of applying and obtaining Representative Outfall Status (ROS) for one or more outfalls to reduce the obligation to monitor all stormwater discharge outfalls (SDOs) on site. ROS designation is handled outside of the permit and is **not available for wastewater outfalls**.

c. Stormwater discharges from vehicle maintenance areas (VMA)

As in the previous version of this General Permit and like most other industrial general permits, permittees are required to separately monitor stormwater discharges originating from site areas where vehicle maintenance activities are conducted. DEMLR's view continues to be that monitoring discharges from qualifying vehicle maintenance areas contributes to the prevention of stormwater pollution from those activities.

d. Qualitative (Visual) monitoring of stormwater discharges

As in previous versions of this General Permit, the permittee must perform twice-per-year qualitative monitoring (visual monitoring) at all stormwater discharge outfalls. The proposed revised permit no longer requires visual monitoring to coincide with the analytical sample.

e. Numerical benchmarks and tiered response structure

As in the previous version of this General Permit, the permittee must respond to benchmark exceedances with increased monitoring, increased management actions, increased record keeping, and/or the installation of stormwater BMPs in a tiered program. The exceedance of a numerical benchmark is not considered a violation of the permit conditions, although failure to respond as per the Tiered response structure would be. In that context, the benchmark value is not a numerical 'permit limit', but rather a management action level value. Four (4) benchmark exceedances require the permittee to notify the DEMLR Regional Office, and may prompt additional requirements under the provisions of Tier Three.

f. Wastewater discharge analytical monitoring and limitations

The draft permit specifies monitoring and reporting requirements for process wastewater discharges. Effluent Guideline limitations for TSS and pH are mandated by 40 CFR §411, and North Carolina Water Quality Standards in the 15A NCAC 2B .0200 rules limit total volume discharge to High Quality Waters (HQWs) to 50 percent of the total in-stream flow of the receiving water under 7Q10 conditions.

This draft permit proposes to (1) modify monitoring for only sensitive waters for settleable solids (SS) and (2) reduce monitoring frequency from quarterly to semi-annually after year 1 if there are not limit exceedances during year 1.

4. MONITORING AND REPORTING REQUIREMENTS

This General Permit specifies monitoring and reporting requirements for both quantitative (analytical) and qualitative (visual) assessment of the **stormwater discharges**, and operational inspections of the entire facility. Sample parameters and sample frequency are based upon pollutants potentially generated from ready-mixed concrete operations as reported in the literature and in on-site monitoring reports from current DEMLR permittees. See section 1 c. above.

The proposed monitoring and reporting requirements include the following changes:

- The proposed permit has been restructured to remove authorization to construct (ATC) requirements that are no longer applicable to this industry. In addition, authorization to construct and operate a Closed-Loop Recycle System (CLRS) that meets design requirements in the 15A NCAC 2T Rules is no longer included as part of this General Permit. *Explanation: The revised structure simplifies the permit and brings requirements up to date with legislation passed in 2011 (See Appendix A). Because the Stormwater Permitting Program has since moved out of the Division of Water Resources (DWR), which administers the Non-Discharge Permitting Program, DEMLR concluded any necessary reviews and approvals of Closed-Loop Recycle Systems should originate with DWR.*

- The proposed permit has updated language in the Stormwater Pollution Prevention Plan (SPPP). Explanation: The revisions make the permit consistent with other more recently updated general permits and attempt to reduce confusion.

- The proposed permit also allows the permittee to **forgo sampling if *adverse weather* conditions prevent sample collection** (see the Definitions section of the draft permit). Inability to sample because of adverse weather conditions must be **documented in the SPPP**, recorded on the data monitoring forms (DMRs), and DMRs submitted to DEMLR. *Explanation: DEMLR feels this is a reasonable accommodation and keeps the safety of all employees in mind. The allowance mimics a similar provision in the EPA's 2015 Multi-Sector Permit without the directive to take a "make-up" sample in the next monitoring period. DEMLR routinely advises permittees to take a "make-up" sample if one is missed during a period and plans to include this information in the final Technical Bulletin.*

- The proposed permit also provides that the permittee is **not required to sample runoff events outside of the normal operating hours** of the business (except in the case of inactive facilities, as they are not operating but may still be bound to sampling requirements—unless suspended by the Division's granting "dormant status."). *Explanation: DEMLR feels this is a reasonable accommodation and keeps the safety of employees in mind. Also, since early 2012 the Division's Stormwater Permitting Program has allowed NPDES stormwater permittees to avoid monitoring requirements under the conditions of plant shut down or extended inactivity when no regulated industrial activities were on-going. Dormant status is granted only upon the Division's inspection of the facility, and concurrence that industrial activities have ceased and no remaining threats to water quality exist from stormwater runoff. No wastewater generation or discharges are allowed during the dormant status period.*

- The proposed permit **eliminates the requirement to record Event Duration and Total Flow** in **stormwater discharges**. *Explanation: DEMLR has removed these parameters in most NPDES stormwater permits over the last few years because run-off volume can be estimated with total rainfall and drainage area (DA) percent imperviousness—information contained in the SPPP for most industrial sites; there was little need for the permittee to report event duration and flow (particularly because mass limits do not apply). However, flow is still required though for discharges to waters classified as HQW or ORW as per 15A NCAC 02B .0200.*

- The proposed permit **drops pH monitoring** in **stormwater discharges from vehicle maintenance areas (VMA)**. *Explanation: DEMLR observed that very few pH measurements from VMA were outside of the benchmark range (See **Appendix B**) and suggests that pH should not be considered a characteristic pollutant of concern for vehicle maintenance areas in this industry. DEMLR has eliminated pH monitoring from VMA monitoring for other industry sectors over the last couple of years based on minimal added value to pollution prevention for runoff from these areas versus the rigor of equipment calibration requirements and constraints of a 15-minute hold time. DEMLR*

also notes that EPA's 2015 MSGP does not include pH monitoring for Sector P, Land Transportation and Warehousing (which specifically includes vehicle maintenance activities).

- The proposed permit has **updated language in the Tier Responses to Benchmark Exceedances**. *Explanation: The revisions make the permit consistent with other more recently updated general stormwater permits. Most notably, the proposed permit allows the permittee to contact the Regional Office as early as Tier 2 to coordinate response actions of Tier 3, rather than waiting to trigger Tier 3.*

- The proposed **permit reduces quarterly monitoring to semi-annual, after year 1** for **wastewater discharges, if there are no exceedances during year 1**. *Explanation: DEMLR considered the relatively good wastewater monitoring data from our NCG14 permittees over the last permit cycle (See **Appendix B**): 10% of pH measurements exceeded the limit, 19% of TSS measurements were potentially over the limit, and SS measurements exceeded the permit limit in less than 0.5% of samples. With the preponderance of wastewater discharges within the permit limits, DEMLR concluded that semi-annual monitoring offers similar performance and control feedback to our permittees as quarterly sampling.*

- The proposed permit **eliminates the monitoring for settleable solids** in **wastewater discharges, <u>except for discharges to sensitive waters (HQW, ORW, SA, SB, PNA, Tr)</u>**. *Explanation: DEMLR considered that settleable solids (SS) measurements exceeded the permit limit of 5 ml/L in less than 0.5% of measurements (See **Appendix B**). DEMLR's assessment is that sufficient control of solids discharges from ready-mixed concrete activities can be achieved based on measuring and responding to TSS limitations. (See Section 7 for more details)*

- The proposed permit **eliminates the exemption of "closed-loop recycle systems designed to operate with two feet of freeboard"** from **wastewater discharge** monitoring. *Explanation: DEMLR considered this monitoring exemption redundant after removing operation of Closed-Loop Recycle Systems (CLRSs) from the scope of this permit. We have deleted the provision to avoid confusion and misinterpretation (e.g., ponds that may have "freeboard" only because they routinely discharge at an outlet 2' below a dike berm). The exemption of wastewater treatment systems that discharge only in response to 10-year, 24-hour storms and greater from analytical sampling provides relief that should also apply to systems that maintain large amounts of freeboard and do not normally discharge. The removal of CLRSs from the scope of the proposed permit (discussed earlier) is also consistent with revisions to the NCG020000 Mining NPDES General Permit at the last renewal.*

- The proposed permit **revises the reporting requirements** to be more consistent with other general permits in DEMLR's program. ~~Conditions no longer require an Annual Report by March 1st of each year, nor separate reporting of benchmark exceedances or~~

~~limit violations to the Regional Office. The permittee must simply send DMRs to the Central Office within 30 days of receiving sample results. *Explanation: The EPA's Electronic Reporting Rule should be finalized during the first year of the permit term and*~~ This includes revisions in accordance with the EPA's Electronic Reporting Rule. *This will require all NPDES permittees to report data electronically in the ~~2016-17~~ 2017-18 timeframe. The Stormwater Permitting Program continues to coordinate with EPA and the Division of Water Resources to use the eDMR infrastructure already in place to implement electronic reporting capabilities.* ***[corrected May 30, 2017]***

- The proposed permit **revises the qualitative monitoring requirements** to (1) allow representative outfall status (ROS) designation to reduce the number of outfalls monitored throughout the permit term, and (2) no longer restrict monitoring to the same event as the analytical samples. *Explanation: DEMLR has allowed ROS for qualitative monitoring for other general permits. Also, under this permit facilities are subject to semi-annual facility inspections. With a monitoring frequency comparable to other stormwater permits (twice per year), and with semi-annual facility inspections, the combined site management oversight in support of stormwater pollution control is sufficient and should not preclude ROS for qualitative monitoring.*

- **Part V, Standard Conditions** for NPDES General Permits has **updated language in various sections**. These include (1) **Section A**: Reducing period for an existing facility that applies for coverage for the first time to develop its SPPP from 1 year to 6 months, (2) **Section B**: new Electronic Reports paragraph in Section B, (3) **Section C**: Distinct bypassing conditions for stormwater controls and wastewater treatment facilities, (4) **Section D**: Allowance for permittee to provide analytical records to a DEMLR inspector electronically upon request. *Explanation: The revisions make the permit consistent with other more recently issued permits in DEMLR's Stormwater Program; address authorized wastewater discharges covered under this General Permit; and respond to a request by the industry to make an allowance for analytical monitoring records to be maintained at a central location away from a mine site (often remote) but available electronically for inspection. DEMLR also concluded that six months is a reasonable expectation for a new facility to develop and implement an SPPP and sees no reason to retain the one year allowance.*

As before, the draft permit incorporates a modified definition of a storm event that is to be sampled. Previous permits and most other stormwater General Permits define the stormwater event to be sampled as the "representative storm event". The NCG140000 permit renewal now requires permittees to sample the "Measurable Storm Event", a new term for North Carolina stormwater permits. The "Measurable Storm Event" is an event that results in an actual discharge, rather than an event with a rainfall measuring 0.1 inches or more. To qualify as a Measurable Storm Event, the previous storm event must have been at least 72 hours prior.

As before, the proposed renewal permit specifies the exemption for what DEMLR considers a "non-discharging system" with a further specification (underlined): analytical monitoring is not required from a "basin or pond designed to contain the 25-year, 24-hour storm without

discharging, and that can regain capacity to hold such an event within five (5) days' time through means other than discharge to surface waters." Often permittees mistakenly interpret other stormwater control measures (SCM) (such as sediment basins, wet ponds, etc.) "designed for the 25-year storm" to qualify for the exemption from monitoring, when in reality those systems do not qualify. Such SCM's do in fact discharge to draw down volume; they are simply designed to safely pass the design event over the emergency spillway without compromising the control structure. In other words, DEMLR is clarifying that *discharges only in response to a storm that is greater than a 25-year, 24 hour storm* are not regulated by this permit.

As before, the proposed renewal permit specifies qualitative (visual) monitoring of each stormwater outfall for the purpose of evaluating the effectiveness of stormwater control measures and assessing new sources of stormwater pollution. Qualitative monitoring parameters include color, odor, clarity, floating and suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The revised permit proposes additional flexibility to **allow representative outfall status** (ROS) specifically for qualitative monitoring (not just for analytical monitoring) without the requirement to qualitatively monitor all outfalls at least annually.

5. COMPLIANCE SCHEDULE

The proposed compliance schedule in Part V, Section A was modified **to address facilities that are renewing coverage** under this new permit, and **to reduce the time period for SPPP development at existing facilities applying for first-time coverage** (from 12 months to 6 months). The permittee is required to comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

> **Existing Facilities already operating but applying for permit coverage for the first time:** The Stormwater Pollution Prevention Plan shall be developed and implemented within 6 months of the effective date of the **Certificate of Coverage** and updated thereafter on an annual basis. Secondary containment, as specified in Part III of this General Permit, shall be accomplished within 12 months of the effective date of the issuance of the **Certificate of Coverage**.
>
> **New Facilities applying for coverage for the first time:** The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part III of this General Permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.
>
> **Existing facilities previously permitted and applying for renewal under this General Permit:** All requirements, conditions, limitations, and controls contained in this permit (except new SPPP elements in this permit renewal) shall become effective immediately upon issuance of the **Certificate of Coverage**. New elements of the Stormwater Pollution Prevention Plan for this permit renewal shall be developed and implemented within 6 months of the effective date of this General Permit and updated thereafter on an annual basis. Secondary containment, as specified in Part III of this General Permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

6. SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

The special conditions in the draft General Permit are the requirements for implementation of the new electronic reporting of monitoring reports [G.S. 143-215.1(b)]. These are included in Part IV. Section F.

7. BASIS FOR CONTROLS AND LIMITATIONS

Stormwater Discharges

The conditions of this draft General Permit have been designed using best professional judgment to achieve water quality protection through compliance with the technology-based standards of the Clean Water Act (Best Available Technology [BAT] and Best Conventional Pollutant Control Technology [BCT]). Where the Director determines that a water quality standard violation is occurring and water quality-based controls or effluent limitations are required to protect the receiving waters, coverage under the General Permit shall be terminated and an individual permit will be required. Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors discussed below in this fact sheet for controlling pollutants in stormwater discharges associated with the activities as described in Item 1 (Types of Discharge Covered), this proposed permit retains a set of requirements for developing and implementing stormwater pollution prevention plans, and specific requirements for monitoring and reporting on stormwater discharges.

The proposed permit conditions reflect the Environmental Protection Agency's (EPA) and North Carolina's continued pollution prevention approach to stormwater permitting. The quality of the stormwater discharge associated with an industrial activity will depend on the availability of pollutant sources. The Division maintains the position that implementing Best Management Practices (BMPs) and traditional stormwater management practices which control the source of pollutants meets the definition of BAT and BCT. The proposed permit conditions (for stormwater) are not numeric effluent limitations, but rather are designed to be flexible requirements for developing and implementing site specific plans to minimize and control pollutants in the stormwater discharges associated with the industrial activity.

Title 40 Code of Federal Regulations (CFR) Part 122.44(k)(2) authorizes the use of BMPs in lieu of numeric effluent limitations in NPDES permits when the agency finds numeric effluent limitations to be infeasible. The agency may also impose BMP requirements which are "reasonably necessary" to carry out the purposes of the Act under the authority of 40 CFR §122.44(k)(3). The conditions of the revised renewal permit are retained under the authority of both of these regulatory provisions. The pollution prevention requirements (BMP requirements) operate as limitations on effluent discharges that reflect the application of BAT/BCT. The basis is that the BMPs identified require the use of source control technologies which, in the context of this permit, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities covered by this stormwater General Permit must prepare, retain, implement, and (at a minimum of annually) update a stormwater pollution prevention plan (SPPP). The term

"pollution prevention" distinguishes this source reduction approach from traditional pollution control measures that rely on end-of-pipe treatment to remove pollutants in the discharges. The pollution prevention approach adopted in the SPPPs in this renewal permit still focuses on two major objectives: 1) to identify sources of pollution potentially affecting the quality of stormwater discharges associated with industrial activity from the facility; and 2) to describe and ensure that practices are implemented to minimize and control pollutants in those discharges from the facility.

The Division believes that it is not appropriate, at this time, to require a single set of effluent limitations (for stormwater) or a single design or operational standard for all facilities which discharge stormwater associated with industrial activity. The permit instead establishes a framework for the development and implementation of a site-specific SPPP. This framework provides flexibility to address the variable risk for pollutants in stormwater discharges associated with the industrial activities from this industry sector, while ensuring procedures to prevent stormwater pollution at a facility are appropriate given the processes employed, engineering aspects, functions, costs of controls, location, and age of facility (as discussed in 40 CFR §125.3). This approach also allows flexibility to establish controls to address varying sources of pollutants at different facilities.

There has been no significant change to this rationale since the previous general permit.

Stormwater Benchmarks

The proposed **pH** benchmark range is based on N.C. Water Quality Standards contained in 15A NCAC 02B .0211 and is consistent with other renewed general stormwater permits. The **total suspended solids (TSS)** benchmark of 100 mg/l is based on the median concentration derived from the National Urban Runoff Program (NURP) study in 1983 and serves as a benchmark in industrial stormwater permits with TSS monitoring. The lower TSS benchmark for ORW, HQW, trout, and primary nursery area (PNA) waters of 50 mg/l reflects half that base value and was set to flag potential problems in discharges to waters with much lower Water Quality Standards for TSS concentrations (20 mg/l for HQW and ORW; 10 mg/l for trout and PNA waters).

The **non-polar oil and grease** (vehicle maintenance only) benchmark of 15 mg/l has been carried over from the previous permit cycle. The value is consistent with other states' benchmarks and/or limits at the time it was introduced and reflects a value we would associate only with significant oil contamination.

Wastewater Discharge Limitations

The authorized process wastewater discharge types from vehicle and equipment cleaning, raw material stockpiles, and mixing drum cleanout are also retained in this draft permit. This draft permit includes **non-polar oil and grease** action levels for wastewater when VMA-derived stormwater drains and commingles with wastewater before discharge. The draft permit effluent limitations are based on N.C. Water Quality Standards and Categorical Effluent Limitations. The **pH and TSS** limitations are based on water quality standards in 15A NCAC 2B

.0200, .0300, and .0400 (40 CFR by reference). Rules in 15A NCAC 02B .0221 and .0222 prohibit any **settleable solids** attributable to industrial or other wastes, which supports a limit on the wastewater discharges in this General Permit for SA, SB, and PNA waters. DEMLR also concluded that applying these SS limits to high quality waters (HQW) and trout (Tr) classifications is appropriate for protecting such waters. The effluent limit for SS is carried over from the previous permit. DEMLR is proposing monitoring for settleable solids only for sensitive waters. More stringent TSS average limits and total flow volume limits are based on N.C. Water Quality Standards for HQW, Trout, and PNA waters.

The draft renewal permit specifies that written authorization is not required when flocculants *already approved by the Division* are administered in accordance with approved maximum application doses and any other current requirements.

The draft permit also incorporates a **limit on total volume of wastewater discharged to HQW classified waters** (50 percent of the 7Q10 flow), as mandated in the 15A NCAC 02B .0224 Rules. DEMLR recognizes that a 7Q10 cannot be calculated for tidally-influenced waters and will continue to use best professional judgement to implement this provision on a case-by-case basis.

8. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

There are no requested variances or alternatives to required standards. Facilities requesting variances to required standards will not be covered under this General Permit but will instead be required to seek coverage under an individual permit.

9. THE ADMINISTRATIVE RECORD

The administrative record, including application, draft permits, fact sheet, public notice, comments received, and additional information is available by writing to:

Stormwater Permitting Program
Division of Energy, Mineral, and Land Resources
1612 Mail Service Center
Raleigh, North Carolina 27699-1612

The above documents are available for review and copying at:

Archdale Building, 9th Floor
DEMLR Stormwater Permitting Program
512 N. Salisbury Street
Raleigh, North Carolina

between the hours of 8:00 AM and 5:00 PM Monday through Friday. Copies will be provided at a charge of 10 cents per page.

10. STATE CONTACT

Additional information about the draft permit may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting:
Rick Riddle at (919) 807-6375 | rick.riddle@ncdenr.gov or,
Robert Patterson at (919) 807-6369 | robert.patterson@ncdenr.gov

11. SCHEDULE OF PERMIT ISSUANCE

Draft Permit Public Notice – Statewide notice published **May 15, 2017**
Draft available online **May 15, 2017**
Comment Period Ends **June 15, 2017**

Permit Issue Date – Scheduled for **June 30, 2017**
Effective July 1, 2017

12. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Division of Energy, Mineral, and Land Resources proposes to issue the NPDES General Permit for the above described stormwater discharges subject to the outlined limitations, management practices, and conditions. These determinations are open to comment from the public.

Interested persons are invited to submit written comments on the permit text or on the Division's proposed determinations to the following address:

Stormwater Permitting Program
Division of Energy, Mineral, and Land Resources
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
Attn: Rick Riddle

All comments received within thirty days following the date of public notice are considered in the formulation of final determinations.

b. Public Meeting

The Director of the Division of Energy, Mineral, and Land Resources may hold a public meeting if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a meeting will be circulated in newspapers in the geographical area of the discharge and to those on the Division's mailing list at least 30 days prior to the meeting.

c. Appeal Hearing

An applicant whose permit is denied, or is granted subject to conditions he deems unacceptable, shall have the right to a hearing before the Commission upon making written demand to the Office of Administrative Hearing within 30 days following issuance or denial of the permit.

d. Issuance of a Permit When no Hearing is Held

If no public meeting or appeal hearing is held, after review of the comments received, and if the Division's determinations are substantially unchanged, the permit will be issued and become effective on the first day of the month following the issuance date. This will be the final action of the Division of Energy, Mineral, and Land Resources.

If a public meeting or appeal hearing is not held, but there have been substantial changes, public notice of the Division's revised determinations will be made. Following a 30-day comment period, the permit will be issued and will become effective on the first day of the month following the issuance date. This will be the final action of the Division unless a public meeting or appeal hearing is granted.

APPENDIX A
Removal of Authorization to Construct (ATC) Requirements for Industrial Treatment Excerpted from Session Law 2011-394

SECTION 9. G.S. 143-215.1 reads as rewritten (changes in highlight):

"**§ 143-215.1. Control of sources of water pollution; permits required.**
(a) Activities for Which Permits Required. – ~~No~~ Except as provided in subsection (a5) of this section, no person shall do any of the following things or carry out any of the following activities unless that person has received a permit from the Commission and has complied with all conditions set forth in the permit:

(1) Make any outlets into the waters of the State.
(2) Construct or operate any sewer system, treatment works, or disposal system within the State.
(3) Alter, extend, or change the construction or method of operation of any sewer system, treatment works, or disposal system within the State.
(4) Increase the quantity of waste discharged through any outlet or processed in any treatment works or disposal system to any extent that would result in any violation of the effluent standards or limitations established for any point source or that would adversely affect the condition of the receiving waters to the extent of violating any applicable standard.
(5) Change the nature of the waste discharged through any disposal system in any way that would exceed the effluent standards or limitations established for any point source or that would adversely affect the condition of the receiving waters in relation to any applicable standards.
(6) Cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with the waters of the State in violation of the water quality standards applicable to the assigned classifications or in violation of any effluent standards or limitations established for any point source, unless allowed as a condition of any permit, special order or other appropriate instrument issued or entered into by the Commission under the provisions of this Article.
(7) Cause or permit any wastes for which pretreatment is required by pretreatment standards to be discharged, directly or indirectly, from a pretreatment facility to any disposal system or to alter, extend or change the construction or method of operation or increase the quantity or change the nature of the waste discharged from or processed in that facility.
(8) Enter into a contract for the construction and installation of any outlet, sewer system, treatment works, pretreatment facility or disposal system or for the alteration or extension of any such facility.
(9) Dispose of sludge resulting from the operation of a treatment works, including the removal of in-place sewage sludge from one location and its deposit at another location, consistent with the requirement of the Resource Conservation and Recovery Act and regulations promulgated pursuant thereto.
(10) Cause or permit any pollutant to enter into a defined managed area of the State's waters for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals.
(11) Cause or permit discharges regulated under G.S. 143-214.7 that result in water pollution.

(12) Construct or operate an animal waste management system, as defined in G.S. 143-215.10B, without obtaining a permit under either this Part or Part 1A of this Article.

(a1) In the event that both effluent standards or limitations and classifications and water quality standards are applicable to any point source or sources and to the waters to which they discharge, the more stringent among the standards established by the Commission shall be applicable and controlling.

(a2) No permit shall be granted for the disposal of waste in waters classified as sources of public water supply where the head of the agency that administers the public water supply program pursuant to Article 10 of Chapter 130A of the General Statutes, after review of the plans and specifications for the proposed disposal facility, determines and advises the Commission that any outlet for the disposal of waste is, or would be, sufficiently close to the intake works or proposed intake works of a public water supply as to have an adverse effect on the public health.

(a3) If the Commission denies an application for a permit, the Commission shall state in writing the reason for the denial and shall also state the Commission's estimate of the changes in the applicant's proposed activities or plans that would be required in order that the applicant may obtain a permit.

(a4) The Department shall regulate wastewater systems under rules adopted by the Commission for Public Health pursuant to Article 11 of Chapter 130A of the General Statutes except as otherwise provided in this subsection. No permit shall be required under this section for a wastewater system regulated under Article 11 of Chapter 130A of the General Statutes. The following wastewater systems shall be regulated by the Department under rules adopted by the Commission:

(1) Wastewater systems designed to discharge effluent to the land surface or surface waters.

(2) Wastewater systems designed for groundwater remediation, groundwater injection, or landfill leachate collection and disposal.

(3) Wastewater systems designed for the complete recycle or reuse of industrial process wastewater.

(a5) No permit shall be required to enter into a contract for the construction, installation, or alteration of any treatment works or disposal system or to construct, install, or alter any treatment works or disposal system within the State when the system's or work's principle function is to conduct, treat, equalize, neutralize, stabilize, recycle, or dispose of industrial waste or sewage from an industrial facility and the discharge of the industrial waste or sewage is authorized under a permit issued for the discharge of the industrial waste or sewage into the waters of the State. Notwithstanding the above, the permit issued for the discharge may be modified if required by federal regulation.

…."

APPENDIX B
NCG140000 DATA SUMMARY (2011-2016)

Stormwater, self-reporting data for the period 2011 – 2016

Parameter	Count of Exceedances	Percentage	Reported Range	Benchmark
TSS	66 / 754	9%	0 – 840 mg/L	100 mg/L *50 mg/L (ORW, HQW, Tr, PNA)*
pH	75 / 780	10%	0.9 – 11.63 ml/L	6 – 9 std units
VMA TPH	2 / 60	3%	0 - 40 mg/L	15 mg/L
VMA TSS	3 / 56	5%	0 - 140 mg/L	100 mg/L *50 mg/L (ORW, HQW, Tr, PNA)*
VMA pH	4 / 57	7%	6.2 – 10.4 std units	6 – 9 std units
New Motor oil usage	60 reports			55 gal/mo (Permit trigger)
Permitees In Tier 2	11 / 293	*4%*		

Wastewater, self-reporting data for the period 2010 – 2016

Parameter	Count of Exceedances*	Percentage	Reported Range	Limitation
TSS	125 / 663	19%	0.1 - 898 mg/L	30 mg/L max *(20 mg/L for HQW, 10 mg/L for Trout & PNA)*
Settleable Solids	3 / 611	0.5%	0.1 – 80.5 ml/L	5 ml/L
pH	69 / 692	10%	5.7 – 11.5 std units	6 – 9 std units *6.8 – 8.5 std units (saltwaters)*
VMA TPH	1 / 569	0.2%	0.98 – 16.4 mg/L	N/A *(15 mg/L benchmark only)*